

WE CLAIM:

1. An electrical power management architecture comprising:
 - a network;
 - at least one electric meter coupled with said network; and
 - an instant message server coupled with said electric meter and said network, said electric meter operative to generate a first instant message to said instant message server and receive a second instant message from said server.
2. The electrical power management architecture of Claim 1 further comprising a presence server coupled with said network and operative to autonomously indicate a connection of said electric meter with said network, said connection characterized by a presence.
3. The electrical power management architecture of Claim 2 further wherein said presence server indicates said presence of said electric meter in substantially real time.
4. The electrical power management architecture of Claim 2 further wherein said presence server receives said presence of said electric meter from said electric meter.
5. The electrical power management architecture of Claim 2, said presence server further including a security module, said security module operative to encrypt said presence.
6. The electrical power management architecture of Claim 2 wherein said presence indicates said electric meter is available.
7. The electrical power management architecture of Claim 2 wherein said presence indicates said electric meter is available with restriction.

8. The electrical power management architecture of Claim 2 wherein said presence indicates said electric meter is active.
9. The electrical power management architecture of Claim 2 wherein said presence indicates said electric meter is unavailable.
10. The electrical power management architecture of Claim 2 wherein said presence shows said electric meter is decoupled from said electrical power management architecture.
11. The electrical power management architecture of Claim 2 further wherein said presence server polls said presence of said electric meter.
12. The electrical power management architecture of Claim 11 further wherein said presence server polls said presence of said electric meter using an electronic mail message.
13. The electrical power management architecture of Claim 11 further wherein said presence server polls said presence of said electric meter on a scheduled basis.
14. The electrical power management architecture of Claim 1, wherein said instant message server is operative to facilitate communication of data using a third instant message.
15. The electrical power management architecture of Claim 14 wherein said third instant message is sent to a plurality of electric meter's, each of said plurality of electric meters being coupled with said network.
16. The electrical power management architecture of Claim 14, wherein said third instant message comprises power management data.
17. The electrical power management architecture of Claim 16 wherein said power management data comprises power quality data.

18. The electrical power management architecture of Claim 16 wherein said power management data comprises upgrade data.
19. The electrical power management architecture of Claim 16 wherein said power management data comprises power management commands.
20. The electrical power management architecture of Claim 1, wherein said instant message server is located on said electric meter.
21. The electrical power management architecture of Claim 1, wherein said instant message server is centralized.
22. The electrical power management architecture of Claim 1, wherein said instant message server is distributed.
23. The electrical power management architecture of Claim 1 further comprising a second network and a firewall, said firewall operative to securely couple said network with a second network.
24. The electrical power management architecture of Claim 1, wherein said network comprises a publicly accessible communications network.
25. The electrical power management architecture of Claim 1, wherein said network comprises a Transmission Control Protocol/Internet Protocol ("TCP/IP") based network.
26. The electrical power management architecture of Claim 25 wherein said network comprises the Internet.
27. The electrical power management architecture of Claim 25 wherein said network comprises an intranet.
28. The electrical power management architecture of Claim 1 wherein said electric meter is a revenue meter.

29. The electrical power management architecture of Claim 1 wherein said electric meter is characterized by a presence, said electric meter operative to broadcast said presence.
30. An electrical power management architecture comprising:
 - a network;
 - a presence server;
 - at least one electric meter coupled with said network, said electric meter operative to autonomously indicate said connection of said electric meter on said network, said presence server operative to receive said autonomous indication.
31. The electrical power management architecture of Claim 30 further wherein said autonomous indication comprises a presence of said electric meter.
32. The electrical power management architecture of Claim 30 further comprising an instant message server coupled with said network.
33. The electrical power management architecture of Claim 30 further wherein said autonomous indication is transmitted to a plurality of available recipients on said network.
34. The electrical power management architecture of Claim 30 wherein said autonomous indication is further characterized by a status.
35. The electrical power management architecture of Claim 30 further wherein said presence server polls said autonomous indication of said electric meter.
36. The electrical power management architecture of Claim 35 further wherein said presence server polls said autonomous indication of said electric meter using an electronic mail message.
37. The electrical power management architecture of Claim 35 further wherein said presence server polls said autonomous indication of said electric meter on a scheduled basis.

38. The electrical power management architecture of Claim 30 further wherein said presence server indicates said autonomous indication of said electric meter in substantially real time.
39. The electrical power management architecture of Claim 30 further wherein said presence server receives said autonomous indication of said electric meter from said electric meter.
40. The electrical power management architecture of Claim 30, said presence server further including a security module, said security module operative to encrypt said presence.
41. The electrical power management architecture of Claim 30, wherein said presence server is located on said electric meter.
42. The electrical power management architecture of Claim 30, wherein said presence server is centralized.
43. The electrical power management architecture of Claim 30 wherein said autonomous indication indicates said electric meter is available with restriction.
44. The electrical power management architecture of Claim 30 wherein said autonomous indication indicates said electric meter is active.
45. The electrical power management architecture of Claim 30 wherein said autonomous indication indicates said electric meter is unavailable.
46. The electrical power management architecture of Claim 45 further wherein said electric meter is available.
47. The electrical power management architecture of Claim 30 wherein said autonomous indication indicates said electric meter is available.
48. The electrical power management architecture of Claim 30 wherein said autonomous indication further indicates said status of said electric meter.

49. The electrical power management architecture of Claim 30 wherein said autonomous indication indicates said electric meter is decoupled from said electrical power management architecture.
50. The electrical power management architecture of Claim 30, wherein said network comprises a publicly accessible communications network.
51. The electrical power management architecture of Claim 30, wherein said network comprises a Transmission Control Protocol/Internet Protocol ("TCP/IP") based network.
52. The electrical power management architecture of Claim 51 wherein said network comprises an intranet.
53. The electrical power management architecture of Claim 30 wherein said autonomous indication is broadcast onto said network.
54. The electrical power management architecture of Claim 30 wherein said electric meter is a revenue meter.
55. The electrical power management architecture of Claim 30 further comprising an instant message server coupled to at least one intelligent electronic device ("IED") and said network.
56. A method of monitoring presence of at least one intelligent electronic device ("IED") in an electrical power management architecture, said method comprising:
 - (a) coupling said IED with a network, said IED being characterized by said presence;
 - (b) transmitting, autonomously, said presence of said IED onto said network;
 - (c) receiving said presence of said IED at a presence server coupled with said network; and
 - (d) monitoring said presence of said IED.

57. The method of claim 56, further comprising said monitoring further comprises updating said presence of said IED on said presence server.
58. The method of claim 56, wherein said receiving further comprises displaying said presence of said IED on said presence server.
59. The method of claim 56, further comprising:
 - (e) encrypting said presence.
60. The method of claim 56, wherein said monitoring further comprises monitoring according to a pre-defined schedule maintained by said presence server.
61. The method of claim 56, wherein said monitoring further comprises monitoring according to a pre-defined schedule maintained by said IED.
62. The method of claim 56, wherein said transmitting further comprises transmitting said presence in response to an occurrence of a event monitored on said IED.
63. An electrical power management architecture comprising:
 - a network;
 - a presence server coupled with said network;
 - at least one intelligent electronic device ("IED") coupled with said network, said IED operative to autonomously indicate said connection of said IED on said network, said presence server operative to receive said autonomous indication.
64. The electrical power management architecture of Claim 63 wherein said IED is a relay.
65. An electrical power management architecture comprising:
 - at least one intelligent electronic device ("IED") coupled with a portion of an electrical power system and further coupled with an internal network;
 - a firewall, said firewall operative to securely couple an external network with said internal network; and
 - a network interface operative to couple said IED with said internal network

and facilitate a communications, initiated by said IED, of first power management data through said firewall from said internal network to said external network.

66. An electrical power management architecture for managing an electrical power distribution system comprising:
 - a network;
 - at least one intelligent electronic device (“IED”) coupled with a portion of said electrical power distribution system and further coupled with said network, each of said at least one IED operative to implement a power management function in conjunction with said portion of said electrical power distribution system, said power management function operative to respond to at least one power management command and generate power management data, each of said at least one IED comprising:
 - a first network interface operative to couple said at least one IED with said network and facilitate autonomous transmission of said power management data and receipt of said at least one power management command over said network; and
 - a security module coupled with said first network interface and operative to prevent unauthorized access to said power management data;
 - said architecture further comprising:
 - a power management application coupled with said network and operative to receive and process said power management data from said at least one IED and generate said at least one power management command to said at least one IED to implement said power management function.
67. The electrical power management architecture of Claim 66 wherein said power management data and said power management commands are communicated as instant messages.